REMARKS/ARGUMENTS

Claims 2-15 stand canceled.

Claims 1, 16-26 are pending.

Applicant has carefully reviewed the Office Action mailed September 7, 2006, including the Examiner's comments. Reconsideration in view of the following remarks is respectfully requested.

Claims 1, 16-26 have been rejected under 35 U.S.C. §102(e) as being anticipated by Boyd et al. U.S. Patent 7,015,861.

In response, it is firstly respectfully noted that Boyd et al. '861 is directed to an antenna, which is substantially different than and not analogous to the presently claimed subject matter directed to a submersible anode. The Examiner's consideration of the following remarks is respectfully requested.

As noted in the present specification, page 1, lines 6, 12-13, 19-20, 22-24, page 2, lines 4-7, page 3, lines 3-8, page 5, lines 1-3, 8, page 6, lines 11-14, 16-21, page 7, lines 14-17, the present invention arose during development efforts directed toward marine cathodic protection systems, for example the noted U.S. Patents 4,322,633, 4,528,460, 4,492,877, 6,183,625, 3,953,742, including the anode providing protection against galvanic corrosion which would otherwise deteriorate various components including propellers and gear cases under the surface of water in which the marine vessel is operated. As well known and understood in the art, anodic galvanic currents are substantially greater than electromagnetic radiation antenna current. In fact, in the latter art area, the term "current flow" is rarely even used, but rather other terms such as electromagnetic radiation or "electromagnetic signals" are used, for example Boyd et al. '861 itself uses such terms, Abstract, last line. Those in the art do not look to nor apply antenna field theory or technology to attempt to solve anodic galvanic corrosion problems. Furthermore, there is no suggestion in the references themselves to attempt same, absent applicant's disclosure. Any reliance upon "inherency" is rebutted because the latter requires not just that the claimed subject matter *may* flow from the applied prior art, but must **necessarily** flow therefrom as required by MPEP 2112. Furthermore, the only possibility that even such result *may* flow from the reference, much less necessarily therefrom, is that taught by applicant, which hindsight is not permissible, i.e. would require application of that which is taught by the invention against its

teacher. It is respectfully submitted that the burden of a prima facie case has not been met because the only linking reference is applicant's disclosure, and there is no other linking reference nor suggestion in the references themselves supporting the proposed application of same.

Boyd et al. '861 notes the importance of materials and shapes being *compatible with antenna design requirements*, Col. 1, line 36, and noting microstrip antennas and various frequency ranges, including VHF/UHF, and that *to be an efficient radiator an antenna must be resonant*, Col. 1, lines 44-45, and further noting *phased-array antennas*, Col. 1, line 64, and further noting formation of the ground plane and microstrip array or radiating element of an *electromagnetic radiation absorptive coating*, Col. 2, lines 51-54. The Examiner's attention is respectfully directed to Boyd et al. '861, Col. 7, lines 12+, noting that *it will be appreciated by those of skill in the art that an analogous method can be used for making* ***other microstrip antennas*** [bold highlighting added], and further at line 32 that the noted variations *will be depend upon the specific* ***antenna design*** [bold highlighting added], and further referencing at line 54 "The Antenna Engineering Handbook". In the various test data, tables and graphs presented by Boyd et al. '861, it is noted at Col. 8, lines 56-60:

> *The antenna in accordance with the present invention can be tuned in order to improve its gain. FIGS. 6 12 are graphs demonstrating the improvements in gain achieved by the addition of a tuning stub, frequency (measured in GHz) being plotted against gain (measured in dB).*

Boyd et al. '861 at Col. 9, line 19, reports success *in receiving satellite signals*.

For the Examiner's reconsideration, it is respectfully submitted that:

1) Boyd et al. '861 is not analogous art;
2) rejection upon "inherency" has been rebutted because MPEP 2112 requires that the result not only *may* flow from the reference but also must **necessarily** flow therefrom;
3) a prima facie case, and the burden thereof, has not been met;
4) there is no suggestion in the references themselves for the proposed application of same to the submersible anode combination set forth in the present claims;

5) the only suggestion for even attempting the proposed application of art is found in applicant's disclosure, and hence is prohibited;

6) there is no motivation for attempting the proposed application of art, absent hindsight, because of the widely divergent purposes, parameters, and technical aspects in electromagnetic radiation antenna art vs. the substantially higher current anodic galvanic protection art.

Reconsideration and removal of the 35 U.S.C. §102(e) rejection is respectfully requested on the basis of and for the reasons noted above.

Furthermore, claims 1, 16-26 define structural and functional limitations and combinations not present in the references, whether or not applied as proposed. These distinctions will now be addressed in the following remarks. The Examiner's consideration is respectfully requested.

Claim 1 requires that the support structure comprise a base (10, Fig. 4) attached to a component (64, e.g. transom) of a marine vessel and protruding outwardly therefrom. This is not shown nor suggested in Boyd et al. '861. Furthermore, it would not be obvious to so modify Boyd et al. '861 because such modification would be contrary to the stated purpose and intent of Boyd et al. '861, as noted at Col. 1, line 21, stating the need for *flush mounted*, and the noted film thickness for the applied coatings, Col. 6, lines 25+. In Boyd et al. '861, layer 110 and layer 120 are each flat sheets extending along and parallel to substrate structure 200, and hence neither sheet layer 110 nor sheet layer 120 can be the required **base** of claim 1 attached to a component (64) of a marine vessel and protruding outwardly therefrom.

Consideration and allowance of claim 1 on the above basis is respectfully requested.

Claim 16 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 16 defines a subcombination distinctive over the prior art, as will now be set forth.

Claim 16 requires that the base (10) have an outer periphery and a cavity (20) recessed inwardly therefrom. This inwardly recessed cavity is nowhere to be found in Boyd et al. '861. Laminated flat sheets or films as in Fig. 3 of Boyd et al. '861, even interpreted broadly, do not reasonably show nor suggest a cavity recessed inwardly from the outer periphery of the defined base.

Claim 16 further requires that the defined cavity (20) have an outer reach at the defined outer periphery of the base, and that the cavity (20) have an inner reach spaced inwardly of the outer reach. This is not reasonably taught in Boyd et al. '861.

Claim 16 further requires that the conductive element (42, Fig. 4) be supported in the defined cavity (20) outwardly of the inner reach. This is not reasonably taught nor suggested in Boyd et al. '861 absent applicant's guidance.

Consideration and allowance of claim 16 on each of the above bases, and on such bases in combination, is respectfully requested.

Claim 17 depends from claim 16 and is believed allowable for the reasons noted above. Furthermore, claim 17 defines a subcombination requiring a sealing encapsulant in the defined cavity (20, page 8, line 9). This is not taught nor suggested in Boyd et al. '861. Claim 17 further requires that the sealing encapsulant in the cavity be in contact with the conductive element (42). This is not shown nor taught in Boyd et al. '861. It would not be obvious to modify Boyd et al. '861 to arrive at the claimed defined structure because of the stated purpose and intent of Boyd et al. '861 of providing a series of conductive and dielectric coatings with specific spacing and pattern array requirements compatible with antenna design requirements for proper radiation and coupling between the radiating element and the ground plane.

Claim 18 depends from claim 17 and is believed allowable for the reasons noted above. Furthermore, claim 18 defines a subcombination requiring that sealing encapsulant be between the conductive element (42) and the defined inner reach of the defined cavity (20). This is not taught nor suggested in Boyd et al. '861. Claim 18 further requires that the conductive element (42) be <u>spaced outwardly</u> of the defined inner reach by the encapsulant therebetween. This is not met by Boyd et al. '861.

Claim 19 depends from claim 18 and is believed allowable for the reasons noted above. Furthermore, claim 19 defines a subcombination requiring that the conductive element (42) be at the defined outer reach of the cavity (20) along the defined outer periphery of the base (10). This is significantly different than Boyd et al. '861.

Claim 20 depends from claim 18 and is believed allowable for the reasons noted above. Furthermore, claim 20 defines a subcombination requiring a dam (50) in the defined cavity (20) isolating the connection of the conductor (30) and the second face (46) of the conductive element (42) from the encapsulant. Applicant notes the Examiner's comment in the Office Action, page

4, fourth to last line, that he "considers the dam to be the insulative material around the pin of the Boyd et al. patent, which insulative material isolated the connection of the conductor to the second face of the microarray". In response, it is respectfully noted that claim 20 calls for the dam (50) to isolate the defined components from the encapsulant, not for the dam to be the "insulative material" as applied by the Examiner.

Claim 21 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 21 defines a subcombination requiring that the conductor (30) engage the second face (46) of the conductive element (42) with a spring loaded contact (44, 48). This structure is entirely absent from Boyd et al. '861 and any reasonable variation thereof, absent applicant's disclosure.

Claim 22 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 22 defines a subcombination requiring that the base (10) have a hole receiving the conductor (30) therethrough for connection to the second face (46) of the conductive element (42).

Claim 23 depends from claim 22 and is believed allowable for the reasons noted above. Furthermore, claim 23 defines a subcombination requiring that the component (64) of the marine vessel have a second hole receiving the conductor (30) therethrough such that the conductor (30) extends through each of the component (64) of the marine vessel and the base (10) through the respective noted first and second holes.

Claim 24 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 24 defines a subcombination requiring that the base (10) have an outer periphery and a cavity (20) recessed inwardly therefrom, and that the cavity (20) have an outer reach at the outer periphery of the base (10), and that the cavity (20) have an inner reach spaced inwardly of the outer reach, and that the conductive element (42) be supported in the cavity (20) outwardly of the inner reach, and that the base (10) have a first hole communicating with the cavity (20) and receiving the conductor (30) extending through the first hole into the cavity (20) for connection to the second face (46) of the conductive element (42), and that the component (64) of the marine vessel have a second hole aligned with the first hole and receiving the conductor (30) therethrough, and that the conductor (30) extend through each of the first and second aligned holes into the cavity (20).

Claim 25 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 25 defines a subcombination requiring that each of the base (10) and the conductive element (42) is a polymer material.

Claim 26 depends from claim 1 and is believed allowable for the reasons noted above. Furthermore, claim 26 defines a subcombination requiring that the component of the marine vessel be a transom (64) of the marine vessel.

The following is in response to the 35 U.S.C. §112 rejection and the request for correction and/or clarification.

Responsive to the Examiner's inquiry, the anode may be supplied by the manufacturer with the marine vessel, or may be installed later. The anode is part of a marine cathodic protection system, as described in the specification and the referenced U.S. patents, including U.S. Patents 4,322,633, 4,528,460, 4,492,877, 6,183,625, 3,953,742, specification, page 1, line 12 through page 3, line 11.

It is believed that no correction to the claims is needed, and reconsideration and removal of the 35 U.S.C. §112 rejection is respectfully requested. The Examiner is invited to contact applicant's undersigned attorney with any questions or comments, or otherwise to facilitate prosecution, or if amendatory claim language is nevertheless deemed appropriate.

It is believed that this application is in condition for allowance with claims 1, 16-26, and such action is earnestly solicited.

Respectfully Submitted,

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